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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,688	08/25/2003	S. Brandon Keller	100111238-1	2946

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FORT COLLINS, CO 80527-2400

EXAMINER
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WHITMORE, STACY

ART UNIT	PAPER NUMBER
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2825

DATE MAILED: 06/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/647,688

Applicant(s)

KELLER ET AL.

Examiner

Stacy A. Whitmore

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2825

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2003.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1,2,8,9,14,15,19 and 20 is/are rejected.  
7) ☒ Claim(s) 3-7,10-13 and 16-18 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 25 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1/05, 2/04.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

### Detailed Action

#### Claim Objections

1. Claims 1, 8, 14, and 19 are objected to because of the following informalities:
  - I. In claims 1, 8, 14, and 19, the phrase "set of visited nets" appears to be a list, but is not claimed as a listAppropriate correction is required.

#### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2, 8-9, 14-15, and 19-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Roberts (US Patent 6,842,888).
3. As for claims 1-2, 8-9, 14-15, and 19-20, Roberts discloses the invention as claimed, including the methods, system and means for, and software product comprising instructions, stored on a computer readable media, comprising:
  - an iterator function [col. 14, line 16; fig. 2, col. 3, lines 43-50];
  - an incomplete trace object [col. 3, lines 43-55];

a processor for executing the iterator function, and invoking the incomplete trace object [col. 14, line 16, fig. 7, element 91, 98-99; col. 3, lines 43-55];

selecting an initial net and instance history that uniquely defines the initial net within the circuit design, [fig. 2, elements 30-31];

appending, to a list of nets to be processed, the initial net and the instance history [fig. 2, elements 30-31];

inserting, into a set of visited nets, the initial net and the instance history [fig. 2, elements 23 to 35 to 24 to 36 to 37 to 31];

visiting, in response to a first request from a user, each additional net connected to the initial net [fig. 2, elements 31-37];

returning, in response to a second request from the user, the initial net and each additional net [fig. 2, elements 31-37];

determining, for each one of the nets to be processed in the list of nets to be processed, the additional nets that are connected to the net to be processed [fig. 2, element 24 ];

checking the set of visited nets to determine unvisited additional nets that have not been visited [fig. 2];

appending, to the list of nets to be processed, each of the unvisited additional nets [fig. 2]; and

inserting, into the set of visited nets, each of the unvisited additional nets [fig. 2].

4. Claims 3-7, 10-13, and 16-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to disclose either singularly or in combination the invention as claimed, including the method, system, means for, or computer program instructions for the steps of calling, querying, and appending as claimed in claims 3, 10, and 16.

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stacy A. Whitmore whose telephone number is (571) 272-1685. The examiner can normally be reached on Monday-Thursday, alternate Friday 6:30am - 4:00 pm.

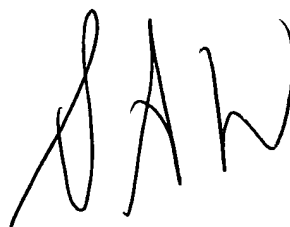
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Smith can be reached on (571) 272-1907. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stacy A Whitmore  
Primary Examiner  
Art Unit 2825

SAW

June 6, 2005

A handwritten signature in black ink, appearing to be 'SAW', written in a stylized, cursive-like font.